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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/017,304	12/11/2001	Yao Wang	EMC-01-201	7237	
7590 02/09/2005			EXAMINEŖ		
Robert Kevin Perkins, Esq.			ENGLAND, DAVID E		
EMC Corporation Office of the General Counsel			ART UNIT	PAPER NUMBER	
35 Parkwood Drive			2143		
Hopkinton, MA	A 01748		DATE MAILED: 02/09/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/017,304	WANG ET AL.	
Office Action Summary	Examiner	Art Unit	
	David E. England	2143	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet wit	th the correspondence a	ddress
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a re eply within the statutory minimum of thirty od will apply and will expire SIX (6) MON [*] rute, cause the application to become AB	eply be timely filed (30) days will be considered time THS from the mailing date of this ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 11	December 2001		
	his action is non-final.		
3) Since this application is in condition for allow		ers, prosecution as to th	e merits is
closed in accordance with the practice unde	·	·	
Disposition of Claims			
4)⊠ Claim(s) <u>1-28</u> is/are pending in the application	on.		
4a) Of the above claim(s) is/are withd			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-28</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	d/or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exami	iner.		
10)☐ The drawing(s) filed on is/are: a)☐ a	ccepted or b) objected to I	by the Examiner.	
Applicant may not request that any objection to the	,	• •	
Replacement drawing sheet(s) including the corre	•	•	
11)☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form P	TO-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for forei	gn priority under 35 U.S.C. §	119(a)-(d) or (f).	
a)☐ All b)☐ Some * c)☐ None of:			
 Certified copies of the priority docume 	ents have been received.		
2. Certified copies of the priority docume			
3. Copies of the certified copies of the pr		received in this Nationa	l Stage
application from the International Bure			
* See the attached detailed Office action for a li	ist of the certified copies not	receivea.	
Attachment(s)	•		
1) Notice of References Cited (PTO-892)		ummary (PTO-413)	,
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		s)/Mail Date aformal Patent Application (PT	. (152)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0			O-152)

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DETAILED ACTION

1. Claims 1 - 28 are presented for examination.

Claim Objections

2. Claims 3, 10 and 20 are objected to because of the following informalities: There are two periods (.) in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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4. Claims 1 – 16, 18 – 26 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Colby et al. U.S. Patent No. 6449647 (hereinafter Colby).

- 5. Referencing claim 1, as closely interpreted by the Examiner, Colby teaches a method for managing network resources for transfer of data stored in a data storage environment, the method comprising the computer-executed steps of:
- 6. requesting from a server for services on an internet network, a bandwidth for data transfer from a first data storage system to a second data storage system over the internet network based on the amount of data to be transferred, (e.g. col. 2, line 65 col. 3, line 9);
- 7. transferring data in response to a bandwidth allocation from the server based on the request, (e.g. col. 9, lines 5-24);
- 8. monitoring internet network traffic characteristics during the data transfer, (e.g. col. 9, lines 5-24); and
- 9. responsive to the monitored internet network traffic characteristics, selectively requesting an effect on bandwidth allocation, (e.g. col. 9, lines 5 24).
- 10. Referencing claim 2, as closely interpreted by the Examiner, Colby teaches the effect requested is to increase bandwidth allocation, (e.g. col. 9, line 36 col. 10, line 8).
- 11. Referencing claim 3, as closely interpreted by the Examiner, Colby teaches the request is in accordance with a Java-based protocol, (e.g. col. 5, lines 28 48).

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12. Referencing claim 4, as closely interpreted by the Examiner, Colby teaches the effect requested is to increase bandwidth allocation is based on the data transfer not meeting at least one performance criterion, (e.g. col. 9, line 36 – col. 10, line 8).

- 13. Referencing claim 5, as closely interpreted by the Examiner, Colby teaches the at least one performance criterion is based on a predetermined data transfer rate, (e.g. col. 9, line 36 col. 10, line 8).
- 14. Referencing claim 6, as closely interpreted by the Examiner, Colby teaches the effect requested is to increase bandwidth allocation is based on the data transfer lagging behind based on the predetermined data transfer rate, (e.g. col. 9, lines 5 24 & TABLE 1).
- 15. Referencing claim 7, as closely interpreted by the Examiner, Colby teaches the monitored internet network traffic characteristics include information regarding packet latency and the data transfer lagging behind is further based on packet latency, (e.g. col. 9, lines 5 35).
- 16. Referencing claim 8, as closely interpreted by the Examiner, Colby teaches the monitored internet network traffic characteristics include information regarding packet loss and the data transfer lagging behind is further based on packet loss, (e.g. col. 9, lines 5 24 & TABLE 1).

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17. Referencing claim 9, as closely interpreted by the Examiner, Colby teaches the data transfer is at least part of a data replication process, (e.g. col. 9, lines 5 – 24 & col. 10, lines 10 – 32).

- 18. Referencing claim 16, as closely interpreted by the Examiner, Colby teaches the data replication is carried out in accordance with a replication policy, (e.g. col. 5, lines 29 48).
- 19. Claims 10 15, 18 26 and 28 are rejected for similar reasons stated above.

Claim Rejections - 35 USC § 103

- 20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 21. Claims 17 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby as applied to claims 1, 9, 16, 18, 19 and 26 above, and in view of Lyon et al. (6028841) (hereinafter Lyon).
- 22. As per claim 17, as closely interpreted by the Examiner, Colby does not specifically teach the replication policy defines replication groups including devices distributed between the first and second data storage systems and the data replication process is completed when all devices

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in the replication groups are synchronized. Lyon teaches the replication policy defines replication groups including devices distributed between the first and second data storage systems and the data replication process is completed when all devices in the replication groups are synchronized, (e.g. col. 6, lines 7 – 15). It would have been obvious to one of ordinary skill in the art at the time the invention was conceived to combine Lyon with Colby because synchronizing all devices would guarantee that all control functions see identical stimuli.

23. Claim 27 is rejected for similar reasons as stated above.

Conclusion

- 24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 25. a. Saxon U.S. Patent No. 5758359 discloses Method and apparatus for performing retroactive backups in a computer system.
- 26. b. Lyles et al. U.S. Patent No. 6563829 discloses Method for providing integrated packet services over a shared-media network.
- 27. c. Kramer et al. U.S. Patent No. 6546014 discloses Method and system for dynamic bandwidth allocation in an optical access network.
- 28. d. Fan et al. U.S. Patent No. 6408005 discloses Dynamic rate control scheduler for ATM networks.

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29. e. Chuah U.S. Patent No. 6469991 discloses Method for overload control in a

multiple access system for communication networks.

30. f. Koperda et al. U.S. Patent No. 6230203 discloses System and method for

providing statistics for flexible billing in a cable environment.

31. g. Dobbins et al. U.S. Patent No. 5790546 discloses Method of transmitting data

packets in a packet switched communications network.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to David E. England whose telephone number is 571-272-3912.

The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David E. England

Examiner

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De //

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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